| Essential Learning | # | Components | Suggested | |
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| Activities | Assessments |
| **VCS T 6.1 Understand the ethical, cultural, and societal issues related to technology**  AK Standard: E1, E2, E3, E4, E5, E6, E7, E8  ISTE Standard: 5a, 5b, 5c, 5d | VCS 6.1.1 | Evaluate ways that technology impacts culture and the environment | Understand that different cultures treat technology differently (i.e. censorship in communist countries, lack of technology in third-world countries, etc.)  Explain how technology and communication has affected global awareness (i.e. faster travel of information and news) | Oral quiz  Teacher observation  Online test  Skills checklist |
|  | VCS 6.1.2 | Practice responsible use of technology systems, information, and software | Describe the consequences of computer hacking, intentional virus-setting, and invasion of privacy  Respect the electronic privacy of others (i.e. not using others’ logins, etc.)  Effectively manage and maintain laptop charging and safe storage |
|  | VCS 6.1.3 | Develop positive attitudes towards technology use that supports lifelong learning, collaboration, personal pursuits, and productivity | Write a journal entry about how technology has had a positive effect on their lives  Access appropriate grade-level websites and games as a reward or free choice activity |
| **VCS T 6.2 Utilize basic input devices**  AK Standard: A1  ISTE Standard: 6a | VCS  6.2.1 | Use appropriate mouse skills | Apply previously-learned mouse skills to the laptop touchpad, including:  Determine when a point, click, drag, drag-and-drop, double-click, or triple-click is necessary to accomplish a task  Demonstrate right-click and/or control-click  Drag-and-drop highlighted text  Recognize mouse icons: I-beam, arrow, double-headed arrow, four-headed arrow, active link, wait icon | Teacher observation  Skills checklist  Rubric  Keyboarding quiz  Typing program results  Project Rubric |
|  | VCS 6.2.2 | Use appropriate keyboarding skills and techniques | Demonstrate appropriate keyboard posture while keeping eyes on the monitor  Practice keying words, phrases and sentences using the home row, QWERTY row, ZXCVB row, and numbers 0-9 using the correct reaches  Key at 90% accuracy rate at 30 words per minute by the end of the year  Key rhythmically  Apply keyboarding skills to document creation and other computer tasks |
|  | VCS  6 .2.3 | Use the keyboard to provide input to applications, software, and the internet | Create grade-level typewritten documents and reports using one-to-one laptop |
| **VCS T 6.3 Demonstrate an understanding of technology concepts, systems, and operations**  AK Standard: A1, A2, A3, A4, A5  ISTE Standard: 6a, 6b, 6c, 6d | VCS 6.3.1 | Recognize, define, and use technology terms, processes and systems | Use the laptop’s built-in camera to take pictures and video  Describe the basic functions of a computer’s internal components: CD/DVD drive, processor, motherboard, memory, graphics card, sounds card, fan, power supply, laptop battery  Transfer data from a flash drive to the hard drive  Identify the relationship between computer specifications and how they affect computer performance (i.e. processor speed, memory, etc.) | Oral quiz  Teacher observation  Skills checklist  Presentation Rubric  Project Rubric |
|  | VCS 6.3.2 | Select and use applications effectively and productively | Use outline formatting in a word processing program  Add music or sound to a presentation  Insert functions into cells in a spreadsheet program  Split and merge cells in a spreadsheet program and tables  Explore publishing possibilities within programs |
|  | VCS 6.3.3 | Diagnose and solve common technology problems | Diagnose and correct internet connectivity problems (i.e. weak signal, starting and re-starting wireless, etc.)  Troubleshoot printer problems (i.e. out of paper, lagging print jobs, etc.) |
| **VCS T 6.4 Demonstrate creative thinking and innovation**  AK Standard: D1  ISTE Standard: 1a, 1b, 1c, 1d | VCS 6.4.1 | Apply knowledge to develop new products using technology | Create a spreadsheet and format a graph using self-selected research material  Create an individual science fair project  Create a country report  Create a diagram showing the phases of the moon | Project Rubric  Teacher observation  Skills checklist |
|  | VCS 6.4.2 | Create original products to convey ideas or as personal or group expression | Write and share a short essay about personal feelings or goals  Create an autobiography or a biography of a classmate  Create an “About the Author” section in the country report project |
|  | VCS 6.4.3 | Explore issues or ideas using models or simulations | Use an online planetarium model to explore stars and constellations  Use an online simulation to construct simple electrical circuits  View and explore a model of the interactive human body |
|  | VCS 6.4.4 | Use technology to forecast trends and possibilities | Graph data and use the information to make a prediction about future values on the graph  Create a diagram or paragraph explaining the possible design of the next version of an existing product or technology |
| **VCS T 6.5 Use digital media and environments to communicate and work collaboratively**  AK Standard: D2, D3  ISTE Standard: 2a, 2b, 2c, 2d | VCS 6.5.1 | Convey ideas to a variety of audiences using digital media and tools | Compose, reply, or forward e-mail messages with attached documents  Communicate an inter-disciplinary project to an audience using digital video or multimedia presentation | Presentation  Rubric  Teacher observation  Skills checklist  Project Rubric |
|  | VCS 6.5.2 | Contribute to project teams to produce original works or solve problems | Create a digital project in small teams in which members have specific jobs (i.e. Team Leader, Resource Organizer, etc.)  Write a reflection on a group project which includes problems that occurred and how they could be solved |
|  | VCS 6.5.3 | Use technology to interact with others to create cultural and global awareness | Communicate with students in another state using e-mail or live videoconferencing |
| **VCS T 6.6 Apply digital tools to gather, evaluate and use information**  AK Standard: B1, B2, B3  ISTE Standard: 3b, 3c, 3d | VCS 6.6.1 | Use technology to locate, evaluate, select, and manage information and sources | Use streaming video to research a project  Edit bookmarks and organize them into folders  Identify the correct keywords to use in an advanced internet search to locate information (i.e. choosing two or three keywords, not entire sentences) | Teacher observation  Skills checklist  Project Rubric  Teacher observation |
|  | VCS 6.6.2 | Ethically use information from a variety of sources to process and present results | Follow the proper use of copyrighted materials and properly cite sources using a bibliography page  Apply the principles of fair use to write a parody of a copyrighted work |
|  | VCS 6.6.3 | Evaluate and select new resources and technology based on the appropriateness to specific tasks | Recognize fact, fiction, and opinion when selecting resources for use  Evaluate a source to ensure it is recent, relevant, and age appropriate  Use a source to find links to additional sources |
| **VCS T 6.7 Use critical thinking skills to solve problems and make decisions**  AK Standard: C1, C2, C3  ISTE Standard: 4a, 4b, 4c, 4d | VCS 6.7.1 | Plan and conduct research for investigation of authentic problems | Use online resources (news web sites, organization web sites, etc.) to conduct research about their individual science fair project | Project Rubric  Teacher observation  Skills checklist |
|  | VCS 6.7.2 | Plan and develop solutions individually or with others to answer a question or complete a project | Plan and conduct an individual science fair project |
|  | VCS 6.7.3 | Derive meaning by evaluating, combining, or extending information using multiple technologies | Create a well-organized, informative display board to present results of an individual science fair project  Create a written report to include with an individual science fair project that includes a graph, graphics or photos, text, and a chart of data |